

**Supplemental Table 1**

Reference	Cell line	Species	Endpoint	LOEC (M) *p<0.05	Concentrations tested (M) *p<0.05	# of doses tested	Log range	NMDRC	+ study	# all	# actual	Any NM?
Hess-Wilson 2007 [1]	LNCaP prostate cancer cells	Human, with AR-T877A mutation	Proliferation (measured by BrdU incorporation)	10 <sup>-9*</sup>	10 <sup>-9*</sup>	1	1	n/a	1	1		
	22Rv1 cells	Human, with AR-H874Y mutation	Expression of ERβ mRNA	10 <sup>-9*</sup>	10 <sup>-9*</sup>	1	1	n/a		2		
	LAPC4 cells	Human, with wildtype AR	Expression of ERβ mRNA	n/a	10 <sup>-9</sup>	1	1	n/a		3		
Kim 2007 [2]	Neural progenitor cells	Mouse	Cell proliferation (in media with natural hormones)	2x10 <sup>-4*</sup>	10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup> , 10 <sup>-5</sup> , 10 <sup>-4</sup> , 2x10 <sup>-4*</sup> , 4x10 <sup>-4*</sup> , 5x10 <sup>-4*</sup>	9	6	No	2	5	1	
			Cytotoxicity (in media with natural hormones)	4x10 <sup>-4*</sup>	10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup> , 10 <sup>-5</sup> , 10 <sup>-4</sup> , 2x10 <sup>-4</sup> , 4x10 <sup>-4*</sup> , 5x10 <sup>-4*</sup>	9	6	No		6	2	
			Cell proliferation (media lacking natural hormones)	10 <sup>-4*</sup>	10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup> , 10 <sup>-5</sup> , 10 <sup>-4*</sup> , 2x10 <sup>-4*</sup> , 4x10 <sup>-4*</sup> , 5x10 <sup>-4*</sup>	9	6	No		7	3	
			Cytotoxicity (media lacking natural hormones)	10 <sup>-4*</sup>	10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup> , 10 <sup>-5</sup> , 10 <sup>-4*</sup> , 2x10 <sup>-4*</sup> , 4x10 <sup>-4*</sup> , 5x10 <sup>-4*</sup>	9	6	No		8	4	
Pelis 2007 [3]	OK kidney cells	Opossum	Tetraethylammonium uptake	2x10 <sup>-4*</sup>	10 <sup>-4</sup> , 2x10 <sup>-4*</sup> , 4x10 <sup>-4*</sup>	3	1	No		9	5	
				n/a	10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup> , 10 <sup>-5</sup> , 10 <sup>-4</sup>	5	5	unaffected		10		
Richter 2007 [4]	Primary prostate mesenchymal cells	Mouse, GD17	Total DNA content	10 <sup>-6*</sup>	10 <sup>-13</sup> , 10 <sup>-12</sup> , 10 <sup>-11</sup> , 10 <sup>-10</sup> , 10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6*</sup> , 10 <sup>-5*</sup> , 10 <sup>-4</sup>	10	10	Yes	3	11	6	1
			Total RNA content	10 <sup>-13*</sup>	10 <sup>-13*</sup> , 10 <sup>-12*</sup> , 10 <sup>-11*</sup> , 10 <sup>-10</sup> , 10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6*</sup> , 10 <sup>-5</sup> , 10 <sup>-4</sup>	10	10	Yes		12	7	
			Expression of androgen receptor mRNA	10 <sup>-9*</sup>	10 <sup>-13</sup> , 10 <sup>-12</sup> , 10 <sup>-11</sup> , 10 <sup>-10</sup> , 10 <sup>-9*</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup> , 10 <sup>-5*</sup> , 10 <sup>-4*</sup>	10	10	No		13	8	
			Expression of ERα mRNA	10 <sup>-9*</sup>	10 <sup>-13</sup> , 10 <sup>-12</sup> , 10 <sup>-11</sup> , 10 <sup>-10</sup> , 10 <sup>-9*</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup> , 10 <sup>-5*</sup> , 10 <sup>-4*</sup>	10	10	Yes – VO*		14	9	
Takamiya 2007 [5]	mLTC-1 Leydig tumor cells	Mouse	Candidate gene expression	10 <sup>-8*</sup>	10 <sup>-8*</sup> , 10 <sup>-7</sup> , 10 <sup>-6*</sup> , 10 <sup>-5</sup> , 10 <sup>-4</sup>	5	5	Yes	4	15	10	2
			Candidate gene expression during hCG treatment	10 <sup>-6*</sup>	10 <sup>-6*</sup> , 10 <sup>-5*</sup> , 10 <sup>-4</sup>	3	3	Yes		16	11	
van Meeuwen 2007 [6]	MCF-7(bus) breast cancer cells	Human	Proliferation		Log [-10 to -4]M (no statistical analysis)	6	5 (7)	No – VO*	5	17	12	
Alonso-Magdalena 2008 [7]	Primary pancreatic islets	Mouse, adult wildtype	Insulin content of islets	10 <sup>-9*</sup>	10 <sup>-10</sup> , 10 <sup>-9*</sup> , 10 <sup>-8*</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup>	5	5	Yes	6	18	13	3
		Mouse, ERαKO		n/a	10 <sup>9</sup>	1	1	unaffected		19		
		Mouse, ERβKO		10 <sup>-9*</sup>	10 <sup>-9*</sup>	1	1	n/a		20		
Buteau-Lozano 2008 [8]	MELN (from MCF-7 breast cancer cells)	Human, transfected with ERE-luciferase	Activation of ERE-luciferase	10 <sup>-7*</sup>	10 <sup>-11</sup> , 10 <sup>-10</sup> , 10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup>	6	6	No	7	21	14	
			Cell viability	n/a	10 <sup>-4</sup> , 10 <sup>-3</sup> , 10 <sup>-2</sup>	3	3	unaffected		22		
	VEGF expression		10 <sup>-6*</sup>	10 <sup>-12</sup> , 10 <sup>-11</sup> , 10 <sup>-10</sup> , 10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6*</sup>	7	7	No		23	15		
	MELP (from MDA-MB-231 breast cancer cells)		Activation of ERE-luciferase	10 <sup>-6*</sup>	10 <sup>-11</sup> , 10 <sup>-10</sup> , 10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6*</sup> , 10 <sup>-5*</sup>	7	7	No		24	16	
VEGF expression		n/a	10 <sup>-12</sup> , 10 <sup>-11</sup> , 10 <sup>-10</sup> , 10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup> , 10 <sup>-5</sup>	8	8	unaffected		25				
Dairkee 2008 [9]	Primary breast epithelial cells	Human, high cancer risk donors	Gene expression profiles	10 <sup>-7*</sup>	10 <sup>-7*</sup>	1	1	n/a		26		
Dominguez 2008 [10]	Primary granulosa-lutein cells	Human, IVF patients	MMP-9 secretion	4.4x10 <sup>-7*</sup>	4.4x10 <sup>-9</sup> , 4.4x10 <sup>-8</sup> , 4.4x10 <sup>-7*</sup> , 4.4x10 <sup>-6*</sup> , 4.4x10 <sup>-5*</sup>	5	5	No	8	27	17	
			Cell viability	4.4x10 <sup>-7*</sup>	4.4x10 <sup>-9</sup> , 4.4x10 <sup>-8</sup> , 4.4x10 <sup>-7*</sup> , 4.4x10 <sup>-6*</sup> , 4.4x10 <sup>-5*</sup>	5	5	No		28	18	
			Proliferation	n/a	4.4x10 <sup>-9</sup> , 4.4x10 <sup>-8</sup> , 4.4x10 <sup>-7</sup> , 4.4x10 <sup>-6</sup> , 4.4x10 <sup>-5</sup>	5	5	unaffected		29		
Eichenlaub-Ritter 2008 [11]	Primary oocytes (maturation competent)	Mouse	Meiotic progression, nuclear maturation, chromosomal constitution	4.4x10 <sup>-5*</sup>	2.2x10 <sup>-7</sup> , 4.4x10 <sup>-7</sup> , 8.8x10 <sup>-7</sup> , 1.8x10 <sup>-6</sup> , 3.5x10 <sup>-6</sup> , 1.8x10 <sup>-5</sup> , 4.4x10 <sup>-5*</sup>	7	3	No	9	30	19	



Bouskine 2009 [22]	JKT-1 testicular seminoma cells	Human	Cell proliferation Phosphorylation of CREB	$10^{-12*}$ $10^{-9*}$	$10^{-12*}, 10^{-10*}, 10^{-8*}, 10^{-6*}, 10^{-5*}$ $10^{-9*}$	5 1	5 (8) 1	Yes n/a	21	67 68	49	11
Dang 2009 [23]	GH3 pituitary cells	Rat	Growth hormone mRNA Prolactin mRNA expression	$10^{-6*}$ $10^{-5*}$	$10^{-7}, 10^{-6*}, 10^{-5*}$ $10^{-7}, 10^{-6}, 10^{-5*}$	3 3	3 3	No no	22	69 70	50 51	
Jolly 2009 [24]	Female stickleback kidney cells	Stickleback, females induced by DHT	Spiggin expression (marker of androgenic activity) Inhibition of DHT-induced spiggin expression	n/a $10^{-8*}$	$10^{-14}, 10^{-12}, 10^{-10}, 10^{-8}, 10^{-6}$ $10^{-14}, 10^{-12}, 10^{-10}, 10^{-8*}, 10^{-6*}$	5 5	5 (9) 5 (9)	n/a no	23	71		52
Kang 2009 [25]	B16 melanoma cells		aPKC phosphorylation	n/a	$10^{-6}, 10^{-5}$	2	2	unaffected		73		
Kochukov 2009 [26]	GH3/B6/F10 pituitary tumor cells	Rat	% of Ca-responding cells Prolactin release  Proliferation (CV assay)  Phosphorylation status of ERK	$10^{-15*}$ $10^{-13*}$  $10^{-6*}$  $10^{-14*}$	$10^{-15*}, 10^{-13}, 10^{-11*}, 10^{-9*}$ $10^{-15}, 10^{-14}, 10^{-13*}, 10^{-12}, 10^{-11}, 10^{-10}, 10^{-9}, 10^{-8}, 10^{-7}, 10^{-6*}$  $10^{-15}, 10^{-14}, 10^{-13}, 10^{-12}, 10^{-11}, 10^{-10}, 10^{-9}, 10^{-8}, 10^{-7}, 10^{-6*}$  $10^{-15}, 10^{-14*}, 10^{-13*}, 10^{-12*}, 10^{-11}, 10^{-10}, 10^{-9*}, 10^{-8*}, 10^{-7*}$	4 10  10  9	4 (7) 10  10  9	Yes Yes  No  Yes	24	74 75	53 54	12
LaPensee 2009 [27]	T47D breast cancer cells  MDA-MB-486 breast cancer cells	Human  Human	Antagonism of chemotherapeutic agents Cell viability  Antagonism of chemotherapeutic agents Cell viability	$10^{-10*}$  $10^{-9*}$  $10^{-10*}$  n/a	$10^{-10*}, 10^{-9*}, 10^{-8*}$  $10^{-10}, 10^{-9*}, 10^{-8*}$  $10^{-10*}, 10^{-9*}, 10^{-8*}$  $10^{-10}, 10^{-9}, 10^{-8}$	3  3  3	3  3  3	No  No  No	25	78	57	
Mlynarcikova 2009 [28]	Primary oocyte-cumulus complexes	Pig	Cumulus expansion Nuclear maturation (oocyte) Synthesis of hyaluronic acid after FSH stimulation Nuclear maturation (oocyte) Progesterone production after FSH stimulation	$10^{-4*}$ $10^{-4*}$ $10^{-4*}$  $10^{-4*}$ $10^{-4*}$	$10^{-10}, 10^{-8}, 10^{-6}, 10^{-4*}$ $10^{-10}, 10^{-8}, 10^{-6}, 10^{-4*}$  $10^{-10}, 10^{-8}, 10^{-6}, 10^{-4*}$ $10^{-10}, 10^{-8}, 10^{-6}, 10^{-4*}$	4 4 1  4 4	4 (7) 4 (7) 1  4 (7) 4 (7)	No No n/a  No No	26	82 83 84	61 62	
Park 2009 [29]	BG-1 ovarian cancer cells	Human	Cell proliferation ERE-luciferase activity (after transient transfection) Activation of MAPK and ERK1/2	$10^{-7*}$ $10^{-6*}$	$10^{-8}, 10^{-7*}, 10^{-6*}, 10^{-5*}$ $10^{-6*}, 10^{-5*}$  Not quantified	4 3	4 2	No No	27	87 88	65 66	
Ricupito 2009 [30]	MCF-7 breast cancer cells	Human	Cell proliferation		$10^{-11}, 10^{-10}, 10^{-9}, 10^{-8}, 10^{-7}, 10^{-6}, 10^{-5}, 10^{-4}, 10^{-3}$ M no statistics	14	9	Yes -VO*	16	48	32	6
Zhu 2009 [31]	MCF-7 breast cancer cells	Human	Proliferation rate		$10^{-9}, 10^{-8}, 10^{-7}, 10^{-6}, 10^{-5}$ , no statistics	5	5	No – VO*	28	89	67	
Asahi 2010 [32]	NCTC Clone 1469 hepatocytes	Mouse	Viability, cell appearance, apoptosis rate Elongation of endoplasmic reticulum, gene expression, intracellular reactive oxygen species production	$10^{-4*}$  $10^{-4*}$	$10^{-7}, 10^{-6}, 10^{-5}, 5 \times 10^{-5}, 10^{-4*}, 2 \times 10^{-4*}$  $10^{-4*}$	6  1	4  1	No  n/a	29	90	68	
Bolli 2010 [33]	DLD-1 colon adenocarcinoma cell	Human	Blocking effect of E2 on cell viability Cell viability (no E2) ERE-containing pC3 promoter activity	$10^{-6*}$ $10^{-3*}$ n/a	$10^{-6*}, 10^{-5*}, 10^{-4*}, 10^{-3}$ $10^{-6}, 10^{-5}, 10^{-4}, 10^{-3*}$ $10^{-7}, 10^{-6}, 10^{-5}, 10^{-4}$	4 4 4	4 4 4	Yes No unaffected	30	92 93 94	69 70	13
Grasselli 2010 [34]	Primary ovarian granulosa cells	Pig	Secretion of estradiol Secretion of progesterone Secretion of VEGF Reactive oxygen species production & scavenger enzyme activities	$10^{-7*}$ $10^{-7*}$ $10^{-6*}$ n/a	$10^{-7*}, 10^{-6*}, 10^{-5*}$ $10^{-7*}, 10^{-6*}, 10^{-5*}$ $10^{-7}, 10^{-6*}, 10^{-5*}$ $10^{-7}, 10^{-6}, 10^{-5}$	3 3 3 3	3 3 3 3	Yes No No unaffected	31	95 96 97 98	71 72 73	14

Habauzit 2010 [35]	MCF-7 breast cancer cells	Human	CXCL12 secretion	n/a	$10^{-12}$ , $10^{-11}$ , $10^{-10}$ , $10^{-8}$ , $10^{-6}$ , $10^{-5}$	6	6 (8)	Unaffected	32	99		
	T47D breast cancer cells	Human	CXCL12 secretion	$10^{-6*}$	$10^{-12}$ , $10^{-11}$ , $10^{-10}$ , $10^{-8}$ , $10^{-6*}$ , $10^{-5*}$	6	6 (8)	No		100	74	
			Cell proliferation	n/a	$10^{-12}$ , $10^{-11}$ , $10^{-10}$ , $10^{-8}$ , $10^{-6}$ , $10^{-5}$	6	6 (8)	Unaffected		101		
			Cell proliferation	$10^{-8*}$	$10^{-12}$ , $10^{-11}$ , $10^{-10}$ , $10^{-8*}$ , $10^{-6*}$ , $10^{-5*}$	6	6 (8)	No		102	75	
Hsu 2010 [36]	Primary mammary epithelial cells	Human	Repression of 16p11.2 gene cluster	$4 \times 10^{-9*}$	$4 \times 10^{-9*}$	1	1	n/a		103		
Iwakura 2010 [37]	Primary hypothalamic neurons	Rat, GD15	MAP2 and Synapsin-I area Phosphorylation of ERK-1 and ERK-2	$10^{-7*}$	$10^{-7*}$	1	1	n/a		104		
				$10^{-7*}$	$10^{-7*}$	1	1	n/a		105		
Jeng 2010 [38]	GH3/B6/F10 pituitary cells	Rat	Changes in calcium responses Levels of pERK Prolactin release Movement of mER $\alpha$ in/out of membrane Movement of mER $\beta$ in/out of membrane Movement of GPER in/out of membrane	$10^{-11*}$	$10^{-11*}$	1	1	n/a	33	106		
				$10^{-9*}$	$10^{-11}$ , $10^{-9*}$	2	2 (3)	no		107	76	
				n/a	$10^{-11}$ , $10^{-9}$	2	2 (3)	unaffected		108		
				$10^{-11*}$	$10^{-11*}$ , $10^{-9*}$	2	2 (3)	no		109	77	
				$10^{-9*}$	$10^{-11}$ , $10^{-9*}$	2	2 (3)	no		110	78	
				n/a	$10^{-11}$ , $10^{-9}$	2	2 (3)	unaffected		111		
Jiao 2010 [39]	Primary hepatocytes	Black seabream	Expression of GHR1 mRNA Expression of GHR2 mRNA Expression of IGF-I mRNA	$10^{-9*}$	$10^{-9*}$ , $10^{-8*}$ , $10^{-7*}$ , $10^{-6*}$	4	4	No	34	112	79	15
				$10^{-8*}$	$10^{-9}$ , $10^{-8*}$ , $10^{-7}$ , $10^{-6}$	4	4	Yes		113	80	
				$10^{-7*}$	$10^{-9}$ , $10^{-8}$ , $10^{-7*}$ , $10^{-6*}$	4	4	No		114	81	
Kim 2010 [40]	R2C Leydig cells	Rat	Aromatase protein & mRNA expression Testosterone production Cell proliferation COX-2 mRNA and protein expression Prostaglandin E2 production Activation of cAMP	$10^{-10*}$	$10^{-10*}$ , $10^{-9*}$ , $10^{-8*}$	3	3	No	35	115	82	
				$10^{-10*}$	$10^{-10*}$ , $10^{-9*}$ , $10^{-8*}$	3	3	No		116	83	
				$10^{-10*}$	$10^{-10*}$ , $10^{-9*}$ , $10^{-8*}$	3	3	No		117	84	
				$10^{-10*}$	$10^{-10*}$ , $10^{-9*}$ , $10^{-8*}$	3	3	No		118	85	
				$10^{-10*}$	$10^{-10*}$ , $10^{-9*}$ , $10^{-8*}$	3	3	No		119	86	
				$10^{-10*}$	$10^{-10*}$ , $10^{-9*}$ , $10^{-8*}$	3	3	no		120	87	
LaPensee 2010 [41]	T47D breast cancer cells	Human	Cell viability Antagonism of cisplatin-induced cytotoxicity Cell death / proliferation induced by cisplatin	$10^{-10*}$	$10^{-11}$ , $10^{-10*}$ , $10^{-9*}$ , $10^{-8*}$	4	4	No	36	121	88	
				$10^{-11*}$	$10^{-11*}$ , $10^{-10*}$ , $10^{-9*}$ , $10^{-8*}$	4	4	No		122	89	
	MDA-MB-486 breast cancer cells	Human, ER $\alpha$ negative	Cytotoxicity	$10^{-8*}$	$10^{-8*}$	1	1	n/a		123		
				$10^{-8*}$	$10^{-8*}$	1	1	n/a		124		
Le 2010 [42]	Primary cerebellar neurons	Rat, neonatal females	LDH release LDH release LDH release LDH release in presence of E2	$10^{-10*}$	$10^{-10*}$	1	1	n/a	37	125		
				$10^{-10*}$	$10^{-10*}$	1	1	n/a		126		
				$10^{-10*}$	$10^{-12}$ , $10^{-11}$ , $10^{-10*}$ , $10^{-9*}$ , $10^{-8*}$ , $10^{-7*}$ , $10^{-6*}$	7	7	no		127	90	
				$10^{-12*}$	$10^{-14}$ , $10^{-13}$ , $10^{-12*}$ , $10^{-11}$ , $10^{-10}$ , $10^{-9}$ , $10^{-8*}$ , $10^{-7*}$ , $10^{-6*}$	9	7	no		128	91	
Lee 2010 [43]	HMC-1 mast cells	Human	Cell viability Cytotoxicity (LDH release) Inhibition of CTB glycoprotein induced $\beta$ -hexosaminidase release Inhibition of CTB glycoprotein induced Ca <sup>2+</sup> release NF-KB activation IL-6, TNF $\alpha$ mRNA expression	n/a	$10^{-8}$ , $5 \times 10^{-8}$ , $10^{-7}$ , $10^{-6}$ , $10^{-5}$ , $2.5 \times 10^{-5}$ , $5 \times 10^{-5}$	7	4	Unaffected		129		
				n/a	$10^{-8}$ , $5 \times 10^{-8}$ , $10^{-7}$ , $10^{-6}$ , $10^{-5}$ , $2.5 \times 10^{-5}$ , $5 \times 10^{-5}$	7	4	Unaffected		130		
				$5 \times 10^{-5*}$	$5 \times 10^{-5*}$	1	1	n/a		131		
				$5 \times 10^{-5*}$	$5 \times 10^{-5*}$	1	1	n/a		132		
				$5 \times 10^{-5*}$	$5 \times 10^{-5*}$	1	1	n/a		133		
				$5 \times 10^{-5*}$	$5 \times 10^{-5*}$	1	1	n/a		134		
Naciff 2010 [44]	Ishikawa endometrial adenocarcinoma cells	Human	Gene expression changes	NR	$10^{-9}$ , $10^{-7}$ , $10^{-5}$ , $10^{-4}$ (no statistics)	4	4 (6)	No – VO*	38	135	92	

Sargis 2010 [45]	3T3-L1 preadipocytes	Mouse	Activation of glucocorticoid response element	$10^{-6*}$	$10^{-6*}$	1	1	n/a	39	136		
			Expression of adipocyte proteins	$10^{-10*}$	$10^{-10*}, 10^{-9*}, 10^{-8*}, 10^{-7*}, 10^{-6*}$	5	5	no		137	93	
			Lipid accumulation	$10^{-7*}$	$10^{-7*}$	1	1	n/a		138		
Schaefer 2010 [46]	Ishikawa endometrial adenocarcinoma cells	Human	Induction of PR mRNA	$10^{-8*}$	Range $10^{-8} - 5 \times 10^{-6}$ , no statistics	7	3	No – VO*	40	139	94	
Thuillier 2010 [47]	Primary gonocytes	Rat, PND3	Proliferation	$10^{-12*}$	$10^{-15}, 10^{-12*}, 10^{-9*}, 10^{-6*}$	4	4	no	41	140	95	
Wang 2010 [48]	Primary chondrocytes	Human, patients with osteoarthritis	Nitric oxide production	n/a	$10^{-11}, 10^{-10}, 10^{-9}, 10^{-8}, 10^{-7}, 10^{-6}, 10^{-5}$	7	7	Unaffected	42	141		16
			Cell viability (MTT assay)	n/a	$10^{-11}, 10^{-10}, 10^{-9}, 10^{-8}, 10^{-7}, 10^{-6}, 10^{-5}$	7	7	Unaffected		142		
	SW135 chondrosarcoma cells	Human	Nitric oxide production in response to IL-1 $\beta$ treatment	$10^{-8*}$	$10^{-11}, 10^{-10}, 10^{-9}, 10^{-8*}, 10^{-7}, 10^{-6}$	7	7	Yes		143	96	
			Nitric oxide production Cell viability (MTT assay)	$10^{-6*}$ $10^{-4*}$	$10^{-8}, 10^{-6*}, 10^{-4*}$ $10^{-8}, 10^{-6}, 10^{-4*}$	3 3	3 (5) 3 (5)	No no		144 145	97 98	
Weng 2010 [49]	Primary breast epithelial cells	Human	% ER $\alpha$ -positive cells Expression of ~15 genes	$4 \times 10^{-9*}$ $4 \times 10^{-9*}$	$4 \times 10^{-9*}$ $4 \times 10^{-9*}$	1 1	1 1	n/a n/a		146 147		
Xu 2010 [50]	Primary hippocampal neurons	Rat, PND24	Filopodia length changes	$10^{-8*}$	$10^{-9}, 10^{-8*}, 10^{-7*}, 10^{-6*}$	4	4	No	43	148	99	
			Number of filopodia	$10^{-8*}$	$10^{-9}, 10^{-8*}, 10^{-7*}, 10^{-6*}$	4	4	No		149	100	
			Phosphorylation of NMDA receptor subunit NR2B	$10^{-8*}$	$10^{-9}, 10^{-8*}, 10^{-7*}, 10^{-6*}$	4	4	no		150	101	
Zhu 2010 [51]	SK-N-SH neuroblastoma cells	Human	Cell migration	$10^{-7*}$	$10^{-7*}$	1	1	n/a		151		
			Cell invasion	$10^{-7*}$	$10^{-7*}$	1	1	n/a		152		
			Expression of MMP-2, MMP-9 and TIMP-2 mRNA	$10^{-7*}$	$10^{-7*}$	1	1	n/a		153		
			Phosphorylation of Akt(Ser473)	$10^{-7*}$	$10^{-7*}$	1	1	n/a		154		
Andersson 2011 [52]	Umbilical vein endothelial cells	Human	Expression of VEGFR-2, VEGF-A, eNOS, Cx43	$10^{-9*}$	$10^{-10}, 10^{-9*}, 10^{-8*}, 10^{-6*}$	4	4 (5)	No	44	155	102	17
			Nitric oxide levels	$10^{-8*}$	$10^{-10}, 10^{-8*}, 10^{-6*}$	3	3 (5)	No		156	103	
			Expression of P-eNOS	$10^{-8*}$	$10^{-9}, 10^{-8*}, 10^{-6*}$	3	3 (4)	No		157	104	
			Number of tubes	$10^{-9*}$	$10^{-9*}, 10^{-8*}, 10^{-6}$	3	3 (4)	Yes		158	105	
			Tube length	$10^{-9*}$	$10^{-9*}, 10^{-8*}, 10^{-6}$	3	3 (4)	Yes		159	106	
Goodson 2011 [53]	Primary breast epithelial cells	Human, high cancer risk donors	Expression of mTOR pathway genes		$10^{-10}, 10^{-9}, 10^{-8}, 10^{-7}$ (no quantification due to small sample size)							
			Inhibition of rapamycin-induced apoptosis	$10^{-7*}$	$10^{-7*}$	1	1	n/a		160		
	T47D, SKBR3	Human, breast cancer cell lines	Inhibition of tamoxifen-induced apoptosis	$10^{-7*}$	$10^{-7*}$	1	1	n/a		161		
			Inhibition of rapamycin-induced apoptosis Inhibition of tamoxifen-induced apoptosis	$10^{-7*}$ $10^{-7*}$	$10^{-7*}$ $10^{-7*}$	1 1	1 1	n/a n/a		162 163		
Jeng 2011 [54]	GH3/B6/F10 pituitary tumor cells	Rat	Phosphorylation of ERK	$10^{-14*}$	$10^{-15}, 10^{-14*}, 10^{-13*}, 10^{-12}, 10^{-11}, 10^{-10}, 10^{-9*}, 10^{-8*}, 10^{-7*}$	9	9	yes	45	164	107	18
Kafi 2011 [55]	SH-SY5Y neuroblastoma cells		Cyclic voltammogram measurements (to calculate cell viability)		Range from $5 \times 10^{-8}$ to $9.5 \times 10^{-6}$ , effect not quantified	19	3	Yes – VO*	46	165	108	19
			MTT cell viability assay		Range from $5 \times 10^{-8}$ to $6 \times 10^{-6}$ , effect not quantified	12	3	Yes – VO*		166	109	
Morice 2011 [56]	JEG-3 trophoblastic cells	Human	Cell viability (measured via LDH activity)	$10^{-5*}$	$10^{-10}, 10^{-9}, 10^{-8}, 10^{-7}, 10^{-6}, 10^{-5*}$	6	6	No	47	167	110	
			Inhibition of proliferation	$10^{-8*}$	$10^{-10}, 10^{-9}, 10^{-8*}, 10^{-7*}, 10^{-6*}$	5	5	No		168	111	
			Expression of cyclin D1 mRNA	n/a	$10^{-8}, 10^{-7}$	2	2	unaffected		169		
			Expression of c-myc mRNA	$10^{-8*}$	$10^{-8*}, 10^{-7*}$	2	2	no		170	112	
			DNA fragmentation	$10^{-8*}$	$10^{-8*}, 10^{-7*}$	2	2	no		171	113	
			p53 mRNA expression	$10^{-8*}$	$10^{-8*}, 10^{-7*}$	2	2	no		172	114	
			M30 protein expression	$10^{-8*}$	$10^{-8*}, 10^{-7*}$	2	2	no		173	115	

Pant 2011 [57]	Heart, atria	Rat	Atrial rate Atrial force		$10^{-7}, 10^{-6}, 10^{-5}, 10^{-4}$ (no statistics) $10^{-7}, 10^{-6}, 10^{-5}, 10^{-4}$ (no statistics)	4 4	4 4	No – VO* No – VO*	48	174 175	116 117	
Ptak 2011 [58]	OVCAR-3 ovarian epithelial carcinoma cells	Human	Cell proliferation Caspase-3 activity DNA fragmentation	$10^{-9*}$ $10^{-9*}$ n/a	$10^{-9*}, 10^{-8*}, 4 \times 10^{-8*}, 10^{-7*}$ $10^{-9*}, 10^{-8*}, 4 \times 10^{-8*}, 10^{-7*}$ $10^{-9}, 10^{-8}, 4 \times 10^{-8}, 10^{-7}$	4 4 4	3 3 3	No No unaffected	49	176 177 178	118 119	
Qin 2011 [59]	BG1Luc4E2 ovarian cancer cells	Human, stably transfected	ESR1-induced luciferase activity in E-CALUX bioassay		$10^{-9} - 10^{-5}$ (no statistics)	9	5	Yes – VO*	50	179	120	20
	MCF-7 breast cancer cells	Human	ARNT2 mRNA expression	$10^{-6*}$	$10^{-7}, 10^{-6*}, 10^{-5*}$	3	3	No		180	121	
	LNCaP prostate cancer cells	Human	ARNT2 mRNA expression ARNT2 protein levels ARNT2 mRNA expression	$10^{-6*}$ $10^{-5*}$ $10^{-7*}$	$10^{-7}, 10^{-6*}, 10^{-5*}$ $10^{-5*}$ $10^{-7*}, 10^{-6*}, 10^{-5*}$	3 1 3	3 1 3	No n/a no		181 182 183	122 123	
Ribeiro 2011 [60]	Primary testis (sections)	Tilapia	Expression of steroidogenesis genes	n/a	$4.4 \times 10^{-8}$	1	1	n/a		184		
Seki 2011 [61]	PC12 pheochromocytoma cells	Rat	Inhibition of NGF-induced differentiation	$4.4 \times 10^{-8*}$	$4.4 \times 10^{-8*}$	1	1	n/a	51	185		
			Cytotoxicity	$2.2 \times 10^{-4*}$	$4.4 \times 10^{-12}, 4.4 \times 10^{-8}, 2.2 \times 10^{-6}, 4.4 \times 10^{-6}, 2.2 \times 10^{-4*}$	5	4 (9)	no		186	124	
			Inhibition of NGF-induced phosphorylation of CREB	$4.4 \times 10^{-8*}$	$4.4 \times 10^{-8*}$	1	1	n/a		187		
Sheng 2011 [62]	GC-1 spermatogonia cells	Mouse, ER $\beta$ -negative	Cell proliferation (MTT assay)	$10^{-12*}$	$10^{-12*}, 10^{-11*}, 10^{-10*}, 10^{-9*}, 10^{-8*}, 10^{-7*}, 10^{-6}, 10^{-5}$	8	8	Yes	52	188	125	21
			$^3\text{H-TdR}$ incorporation (proliferation)	$10^{-12*}$	$10^{-12*}, 10^{-11*}, 10^{-10*}, 10^{-9*}, 10^{-8*}, 10^{-7*}, 10^{-6}, 10^{-5}$	8	8	Yes		189	126	
			Phosphorylation of CREB, Rb	$10^{-9*}$	$10^{-9*}$	1	1	n/a		190		
Yan 2011 [63]	Primary heart myocytes	Rat, females	Induction of spontaneous after-contractions	$10^{-9*}$	$10^{-9*}$	1	1	n/a	53	191		
			% cells with transient after $\text{Ca}^{2+}$	$10^{-9*}$	$10^{-9*}$	1	1	n/a		192		
			% of cells with triggered activities	$10^{-9*}$	$10^{-9*}, 2 \times 10^{-9*}$	2	1	No		193	127	
		Rat, males	$\text{Ca}^{2+}$ transient amplitude & decay time	$10^{-9*}$	$10^{-9*}$	1	1	n/a		194		
			$\text{Ca}^{2+}$ transient amplitude & decay time after caffeine treatment	$10^{-9*}$	$10^{-9*}$	1	1	n/a		195		
			$\text{Ca}^{2+}$ induced spark frequency	$10^{-9*}$	$10^{-9*}$	1	1	n/a		196		
% of cells with triggered activities	n/a	$10^{-9}$	1	1	n/a		197					
Yang 2011 [64]	MCF-7 breast cancer cells	Human	Cell number	$\sim 10^{-9*}$	Range $< 10^{-10} - 10^{-6}$ , individual doses not statistically analyzed	10	6	No – VO*	54	198	128	
Ye 2011 [65]	Primary Leydig cells	Rat, PND90	Testosterone production in the presence of various hormones	$10^{-5*}$	$10^{-11}, 10^{-9}, 10^{-7}, 10^{-6}, 10^{-5*}, 10^{-4*}$	6	6 (8)	No	55	199	129	
Zhang 2011 [66]	H295R adenocarcinoma cells	Human	Production of progesterone, estrone & estradiol	$1.3 \times 10^{-5*}$	$1.3 \times 10^{-9}, 1.3 \times 10^{-8}, 1.3 \times 10^{-7}, 1.3 \times 10^{-6}, 1.3 \times 10^{-5*}$	5	5	No	56	200	130	
			Inhibition of corticosterone & cortisol	$1.3 \times 10^{-5*}$	$1.3 \times 10^{-9}, 1.3 \times 10^{-8}, 1.3 \times 10^{-7}, 1.3 \times 10^{-6}, 1.3 \times 10^{-5*}$	5	5	No		201	131	
			Inhibition of testosterone	$1.3 \times 10^{-5*}$	$1.3 \times 10^{-9}, 1.3 \times 10^{-8}, 1.3 \times 10^{-7*}, 1.3 \times 10^{-6*}, 1.3 \times 10^{-5*}$	5	5	No		202	132	
			Inhibition of androstenedione	$1.3 \times 10^{-7*}$	$1.3 \times 10^{-9}, 1.3 \times 10^{-8}, 1.3 \times 10^{-7}, 1.3 \times 10^{-6*}, 1.3 \times 10^{-5*}$	5	5	No		203	133	
			Estrogen metabolism	$1.3 \times 10^{-6*}$	$3.9 \times 10^{-8}, 1.56 \times 10^{-7}, 6.25 \times 10^{-7}, 2.5 \times 10^{-6}, 10^{-5*}, 4 \times 10^{-5*}$	6	4	No		204	134	
Belcher 2012 [67]	Primary ventricular myocytes	Rat, female	Fractional shortening	$10^{-12*}$	$10^{-12*}, 10^{-10*}, 10^{-9*}, 10^{-8*}, 10^{-6*}$	5	5 (7)	Yes	57	205	135	22
		Rat, OVX female		n/a	$10^{-9}$	1	1	n/a		206		
		Rat, male		n/a	$10^{-9}$	1	1	n/a		207		
		Rat, castrated male		n/a	$10^{-9}$	1	1	n/a		208		

Biemann 2012 [68]	C3H/10T1/2 mesenchymal stem cells	Mouse	Number of adipocytes	$10^{-5*}$	$10^{-8}$ , $10^{-5*}$	2	2 (4)	No	58	209	136	
	CGR8 pluripotent embryonic stem cells	Mouse	Triglyceride content	$10^{-5*}$	$10^{-8}$ , $10^{-5*}$	2	2 (4)	No		210	137	
			Number of adipocytes	n/a	$10^{-5}$	1	1	n/a		211		
Chamorro-Garcia 2012 [69]	Mesenchymal stem cells	Human	Lipid accumulation	n/a	$10^{-9}$ , $10^{-8}$ , $10^{-7}$ , $10^{-6}$	4	4	unaffected	59	212		23
	Mesenchymal stem cells	Mouse	Expression of adipogenic genes	n/a	$10^{-7}$	1	1	n/a		213		
	3T3-L1 preadipocytes	Mouse	Lipid accumulation	n/a	$10^{-9}$ , $10^{-8}$ , $10^{-7}$ , $10^{-6}$	4	4	unaffected		214		
			Expression of adipogenic genes	n/a	$10^{-7}$	1	1	n/a		215		
			Lipid accumulation	$10^{-8*}$	$10^{-9}$ , $10^{-8*}$ , $10^{-7*}$ , $10^{-6}$	4	4	Yes		216	138	
Chevalier 2012 [70]	JK-1 testicular seminoma cells	Human	Cell proliferation	$10^{-9*}$	$10^{-9*}$	1	1	n/a		217		
Hall 2012 [71]	BG-1 epithelial ovarian cancer cells	Human	Cell proliferation	$10^{-8*}$	$10^{-9}$ , $10^{-8*}$ , $10^{-7*}$ , $10^{-6*}$ , $10^{-5*}$	5	5	No	60	218	139	24
			Expression of ER-regulated genes	$10^{-7*}$	$10^{-7*}$	1	1	n/a		219		
			Induction of CXCL12 expression	$10^{-9*}$	$10^{-9*}$ , $10^{-8*}$ , $10^{-7*}$ , $10^{-6}$	4	4	yes		220	140	
			Production of CXCL12	$10^{-7*}$	$10^{-7*}$	1	1	n/a		221		
			Production of CXCL12	$10^{-7*}$	$10^{-7*}$	1	1	n/a		222		
Huc 2012 [72]	HepG2 hepatocellular cancer cells	Human	Production of mitochondrial superoxide anions	$10^{-9*}$	$10^{-12}$ , $10^{-9*}$ , $10^{-8}$ , $10^{-7}$ , $10^{-6}$ , $10^{-5*}$ , $10^{-4*}$	7	7 (9)	Yes	61	223	141	25
				$10^{-12*}$	$10^{-12*}$ , $10^{-9*}$ , $10^{-8*}$ , $10^{-7*}$ , $10^{-6*}$ , $10^{-5*}$ , $10^{-4}$	7	7 (9)	Yes		224	142	
				$10^{-12*}$	$10^{-12*}$ , $10^{-9*}$ , $10^{-8*}$ , $10^{-7*}$ , $10^{-6*}$ , $10^{-5*}$ , $10^{-4}$	7	7 (9)	Yes		225	143	
			Cytosolic superoxide anions	$10^{-12*}$	$10^{-12*}$ , $10^{-9*}$ , $10^{-8*}$ , $10^{-7*}$ , $10^{-6*}$	5	5 (7)	No (Yes VO*)		226	144	
				$10^{-8*}$	$10^{-12}$ , $10^{-9}$ , $10^{-8*}$ , $10^{-7}$ , $10^{-6}$ , $10^{-5}$	6	6 (8)	Yes		227	145	
				$10^{-9*}$	$10^{-12}$ , $10^{-9*}$ , $10^{-8*}$ , $10^{-7*}$ , $10^{-6*}$ , $10^{-5}$ , $10^{-4*}$	7	7 (9)	Yes		228	146	
			4HNE histidine adducts Mitochondrial transmembrane potential	$10^{-12*}$	$10^{-12*}$ , $10^{-9*}$ , $10^{-8*}$ , $10^{-7*}$ , $10^{-6*}$ , $10^{-5*}$ , $10^{-4}$	7	7 (9)	Yes		229	147	
				$10^{-12*}$	$10^{-12*}$ , $10^{-9*}$ , $10^{-8*}$ , $10^{-7*}$ , $10^{-6*}$ , $10^{-5*}$ , $10^{-4*}$	7	7 (9)	No		230	148	
				n/a	$10^{-12}$ , $10^{-9}$ , $10^{-8}$ , $10^{-7}$ , $10^{-6}$ , $10^{-5}$ , $10^{-4}$	7	7 (9)	Unaffected		231		
			Nitric oxide production	n/a	$10^{-12}$ , $10^{-9}$ , $10^{-8}$ , $10^{-7}$ , $10^{-6}$ , $10^{-5}$ , $10^{-4}$	7	7 (9)	Unaffected		232		
				n/a	$10^{-12}$ , $10^{-9}$ , $10^{-8}$ , $10^{-7}$ , $10^{-6}$ , $10^{-5}$ , $10^{-4}$	7	7 (9)	Unaffected		233		
				$10^{-5*}$	$10^{-12}$ , $10^{-9}$ , $10^{-8}$ , $10^{-7}$ , $10^{-6}$ , $10^{-5}$ , $10^{-4}$	6	6 (8)	No		234	149	
			Jung 2012 [73]	MCF-7 breast cancer cells	Human	Mammosphere formation (3D culture)	$10^{-4*}$	$10^{-7}$ , $10^{-6}$ , $10^{-5}$ , $10^{-4*}$	4	4	no	62
Kim 2012 [74]	GH3 pituitary carcinoma cells	Rat	ERE activity (luciferase assay)	$10^{-6*}$	$10^{-7}$ , $10^{-6*}$ , $10^{-5*}$	3	3	No	63	236	151	
			CaBP-9k mRNA expression	$10^{-5*}$	$10^{-7}$ , $10^{-6}$ , $10^{-5*}$	3	3	No		237	152	
			CaBP-9k protein expression	$10^{-7*}$	$10^{-7*}$ , $10^{-6*}$ , $10^{-5*}$	3	3	No		238	153	
			PR mRNA & protein expression	$10^{-7*}$	$10^{-7*}$ , $10^{-6*}$ , $10^{-5*}$	3	3	no		239	154	
Lee 2012 [75]	Preimplantation embryos (co-cultured with human endometrial cells)	Mouse	Survival to blastocyst stage	$10^{-4*}$	$10^{-8}$ , $10^{-6}$ , $10^{-4*}$	3	3 (5)	No	64	240	155	
	Preimplantation embryos (co-cultured with human endometrial cells)	Mouse		$10^{-4*}$	$10^{-8}$ , $10^{-6}$ , $10^{-4*}$	3	3 (5)	No		241	156	

Li 2012 [76]	Ishikawa endometrial adenocarcinoma cells	Human	ERα activation (luciferase assay)	10 <sup>-7*</sup>	10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup>	4	4	No Unaffected	65	242	157		
			ERβ activation (luciferase assay)	n/a	10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup>	4	4			243			
			ERα activation in response to E2	10 <sup>-9*</sup>	10 <sup>-9*</sup> , 10 <sup>-8*</sup>	2	2			244	158		
			Activation of MAPK pathway	10 <sup>-7*</sup>	10 <sup>-7*</sup>	1	1			245			
			Expression of ER target genes	10 <sup>-7*</sup>	10 <sup>-7*</sup>	1	1			246			
	HeLa cervical epithelial cancer cells	Human	ERα activation (luciferase assay)	10 <sup>-9*</sup>	10 <sup>-9*</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup>	4	4	no		247	159		
			ERβ activation (luciferase assay)	10 <sup>-7*</sup>	10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup>	4	4	no		248	160		
			ERβ activation in response to E2	n/a	10 <sup>-9</sup> , 10 <sup>-8</sup>	2	2	unaffected		249			
	HepG2 hepatocellular cancer cells	Human	ERα activation (luciferase assay)	10 <sup>-7*</sup>	10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup>	4	4	no		250	161		
ERβ activation (luciferase assay)			n/a	10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup>	4	4	unaffected	251					
Linehan 2012 [77]	Adult stem cells	Human	Triglyceride accumulation	8x10 <sup>-5*</sup>	8x10 <sup>-8</sup> , 8x10 <sup>-6</sup> , 8x10 <sup>-5*</sup>	3	3 (4)	No Unaffected	66	252	162		
			Adipogenic differentiation	n/a	8x10 <sup>-8</sup> , 8x10 <sup>-6</sup> , 8x10 <sup>-5</sup>	3	3 (4)			253			
			Glycerol secretion	8x10 <sup>-5*</sup>	8x10 <sup>-5*</sup>	1	1			n/a	254		
			mRNA expression of adipogenic markers	8x10 <sup>-5*</sup>	8x10 <sup>-5*</sup>	1	1			n/a	255		
Moon 2012 [78]	HepG2 liver cells		Morphology of mitochondria	10 <sup>-8*</sup>	10 <sup>-8*</sup> , 10 <sup>-7*</sup>	2	2	No	67	256	163		
			Mitochondria function	10 <sup>-8*</sup>	10 <sup>-8*</sup> , 10 <sup>-7*</sup>	2	2			No	257		164
			Cell viability	n/a	10 <sup>-7</sup>	1	1			Unaffected	258		
			Oxidative stress	10 <sup>-7*</sup>	10 <sup>-7*</sup>	1	1			n/a	259		
Nanjappa 2012 [79]	Progenitor Leydig cells	Rat	Cell proliferation	10 <sup>-10*</sup>	10 <sup>-10*</sup> , 10 <sup>-8*</sup>	2	2 (3)	No	68	260	165		
			Protein expression (IGF pathway)	10 <sup>-8*</sup>	10 <sup>-8*</sup>	1	1			n/a	261		
			AMHR2 protein expression	10 <sup>-8*</sup>	10 <sup>-10</sup> , 10 <sup>-8*</sup>	2	2 (3)			no	262		166
N'Tumba-Byn 2012 [80]	Fetal testes	Human	Testosterone secretion	10 <sup>-8*</sup>	10 <sup>-12</sup> , 10 <sup>-8*</sup> , 10 <sup>-7</sup> , 10 <sup>-5*</sup>	4	4 (8)	Yes	69	263	167	26	
				10 <sup>-8*</sup>	10 <sup>-12</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup> , 10 <sup>-5*</sup>	4	4 (8)			No	264		168
				10 <sup>-8*</sup>	10 <sup>-12</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup> , 10 <sup>-5*</sup>	4	4 (8)			No	265		169
		Rat	Testosterone secretion	10 <sup>-5*</sup>	10 <sup>-12</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-5*</sup>	4	4 (8)	No	266	170			
				10 <sup>-5*</sup>	10 <sup>-12</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-5*</sup>	4	4 (8)	No	267	171			
				10 <sup>-5*</sup>	10 <sup>-12</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-5*</sup>	4	4 (8)	No	268	172			
		Mouse	Testosterone secretion	10 <sup>-5*</sup>	10 <sup>-12</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-5*</sup>	4	4 (8)	No	269	173			
				10 <sup>-5*</sup>	10 <sup>-12</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-5*</sup>	4	4 (8)	No	270	174			
				10 <sup>-5*</sup>	10 <sup>-12</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-5*</sup>	4	4 (8)	no	271	175			
Pisapia 2012 [81]	MCF7 breast cancer cells Bone marrow dendritic cells	Human	Cell cycle kinetics during starvation	10 <sup>-5*</sup>	10 <sup>-7</sup> , 10 <sup>-6</sup> , 10 <sup>-5*</sup>	3	3	No	70	272	176		
		Mouse	Induction of differentiation	10 <sup>-7*</sup>	10 <sup>-7*</sup> , 10 <sup>-6*</sup> , 10 <sup>-5*</sup>	3	3			No	273		177
Ptak 2012 [82]	OVCAR-3 ovarian epithelial cancer cells	Human	Leptin mRNA expression	3.5x10 <sup>-8*</sup>	8.8x10 <sup>-10</sup> , 8.8x10 <sup>-9</sup> , 3.5x10 <sup>-8*</sup> , 8.8x10 <sup>-8*</sup>	4	3	No	71	274	178		
			Leptin protein expression	3.5x10 <sup>-8*</sup>	8.8x10 <sup>-10</sup> , 8.8x10 <sup>-9</sup> , 3.5x10 <sup>-8*</sup> , 8.8x10 <sup>-8*</sup>	4	3			No	275		179
			Cell proliferation	8.8x10 <sup>-10*</sup>	8.8x10 <sup>-10*</sup> , 3.5x10 <sup>-8*</sup>	2	2 (3)			No	276		180
			MAPK signaling pathways	3.5x10 <sup>-8*</sup>	3.5x10 <sup>-8*</sup>	1	1			n/a	277		
Pupo 2012 [83]	SKBR3 breast cancer epithelial cells	Human	Induction of ERK1/2 phosphorylation	10 <sup>-7*</sup>	10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup>	4	4	No	72	278	181		
			Expression of GPER target genes	10 <sup>-6*</sup>	10 <sup>-6*</sup>	1	1			n/a	279		
			Cell proliferation	10 <sup>-6*</sup>	10 <sup>-6*</sup>	1	1			n/a	280		
			Cell migration (in conditioned media)	10 <sup>-6*</sup>	10 <sup>-6*</sup>	1	1			n/a	281		
	Primary breast cancer associated fibroblasts	Human	Induction of ERK1/2 phosphorylation	10 <sup>-7*</sup>	10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup>	4	4	no		282	182		
			Expression of GPER target genes	10 <sup>-6*</sup>	10 <sup>-6*</sup>	1	1	n/a		283			
			Cell proliferation	10 <sup>-6*</sup>	10 <sup>-6*</sup>	1	1	n/a		284			
			Cell migration	10 <sup>-6*</sup>	10 <sup>-6*</sup>	1	1	n/a		285			
Qin 2012 [84]	Primary foreskin fibroblasts	Human, hypospadias & cryptorchidism patients (children)	Gene expression	10 <sup>-8*</sup>	10 <sup>-8*</sup>	1	1	n/a		286			

Sheng 2012 [85]	CV-1 kidney cells	Monkey	TR-mediated transcription Reporter gene activation of TR RXR-mediated transcription Recruitment of cofactors	10 <sup>-9*</sup> 10 <sup>-9*</sup> n/a 10 <sup>-9*</sup>	10 <sup>-9*</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup> 10 <sup>-9*</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup> 10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> 10 <sup>-9*</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup>	3 3 3 3	3 3 3 3	No No Unaffected No	73	287 288 289 290	183 184 185	
Soriano 2012 [86]	Pancreatic islets	Mouse (wildtype)	Insulin release in the presence of 8 mM glucose Katp channel activity in presence of 8mM glucose	10 <sup>-10*</sup> 10 <sup>-9*</sup>	10 <sup>-10*</sup> , 10 <sup>-9*</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup> 10 <sup>-9*</sup>	4 1	4 1	No n/a	74	291 292	186	
	Pancreatic islets	Mouse (ER-beta knockout)	Glucose-induced calcium oscillations Glucose-induced insulin secretion Katp channel activity in presence of 8mM glucose	10 <sup>-9*</sup> 10 <sup>-9*</sup> n/a	10 <sup>-9*</sup> 10 <sup>-9*</sup> 10 <sup>-9</sup>	1 1 1	1 1 1	n/a n/a unaffected		293 294 295		
	Pancreatic islets	Human	Glucose-induced calcium oscillations Glucose-induced insulin secretion Katp channel activity Glucose-induced insulin secretion	n/a n/a 10 <sup>-9*</sup> 10 <sup>-9*</sup>	10 <sup>-9</sup> 10 <sup>-9</sup> 10 <sup>-9*</sup> 10 <sup>-9*</sup>	1 1 1 1	1 1 1 1	unaffected unaffected n/a n/a		296 297 298 299		
Tanabe 2012 [87]	Primary hippocampal neurons	Rat	Number of spines per dendrite Spine density Spine morphology	10 <sup>-8*</sup> 10 <sup>-8*</sup> 10 <sup>-8*</sup>	10 <sup>-9</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup> , 10 <sup>-5</sup> 10 <sup>-8*</sup> 10 <sup>-8*</sup>	4 1 1	4 (5) 1 1	Yes n/a n/a	75	300 301 302	187	27
Taxvig 2012 [88]	3T3-L1 preadipocytes	Mouse	PPARα activation PPARγ activation Lipid accumulation	10 <sup>-4*</sup> n/a 2x10 <sup>-5*</sup>	3x10 <sup>-7</sup> , 10 <sup>-6</sup> , 3x10 <sup>-6</sup> , 10 <sup>-5</sup> , 3x10 <sup>-5</sup> , 10 <sup>-4*</sup> 3x10 <sup>-7</sup> , 10 <sup>-6</sup> , 3x10 <sup>-6</sup> , 10 <sup>-5</sup> , 3x10 <sup>-5</sup> , 10 <sup>-4</sup> 5x10 <sup>-6</sup> , 10 <sup>-5</sup> , 2x10 <sup>-5*</sup>	6 6 3	4 4 2	No Unaffected no	76	303 304 305	188	189
Tilghman 2012 [89]	MCF-7 breast cancer epithelial cells	Human	ERE-luciferase assay Gene expression Micro RNA expression	10 <sup>-7*</sup> 10 <sup>-5*</sup> 10 <sup>-5*</sup>	10 <sup>-7*</sup> , 2x10 <sup>-7*</sup> , 4x10 <sup>-7*</sup> , 6x10 <sup>-7*</sup> , 8x10 <sup>-7*</sup> , 10 <sup>-6*</sup> 10 <sup>-5*</sup> 10 <sup>-5*</sup>	6 1 1	2 1 1	No n/a n/a	77	306 307 308	190	
Wang 2012 [90]	Primary omental fat	Human	mRNA expression (steroidogenesis & adipogenesis genes) 11β-HSD1 enzymatic activity	10 <sup>-8*</sup> 10 <sup>-8*</sup>	10 <sup>-8*</sup> , 10 <sup>-6*</sup> , 8x10 <sup>-6*</sup> 10 <sup>-8*</sup> , 10 <sup>-6*</sup> , 8x10 <sup>-6*</sup>	3 3	2 2	No No	78	309 310	191	192
	Visceral pre-adipocytes	Human	11β-HSD1 gene expression	10 <sup>-8*</sup>	10 <sup>-8*</sup> , 10 <sup>-6*</sup> , 8x10 <sup>-6*</sup>	3	2	No		311	193	
	Visceral adipocytes	Human	11β-HSD1 gene expression % with lipid accumulation mRNA expression (adipogenesis genes)	10 <sup>-8*</sup> 10 <sup>-8*</sup> 10 <sup>-8*</sup>	10 <sup>-8*</sup> , 10 <sup>-6</sup> , 8x10 <sup>-6*</sup> 10 <sup>-8*</sup> , 10 <sup>-6</sup> , 8x10 <sup>-6*</sup> 10 <sup>-8*</sup> , 10 <sup>-6*</sup> , 8x10 <sup>-6*</sup>	3 3 3	2 2 2	No No no		312 313 314	194 195 196	
Watson 2012 [91]	GH3/B6/F10 pituitary tumor cells	Rat	pERK expression Gα-deactivation Gα-deactivation in presence of GTPγS	10 <sup>-14*</sup> n/a 10 <sup>-14*</sup>	10 <sup>-14*</sup> , 10 <sup>-9*</sup> 10 <sup>-14</sup> , 10 <sup>-9</sup> 10 <sup>-14*</sup> , 10 <sup>-9*</sup>	2 2 2	2 (5) 2 (5) 2 (5)	No Unaffected No	79	315 316 317	197	198
Wu 2012 [92]	HBL-100 breast epithelial cells	Human	Cell proliferation Cell cycle kinetics Protein expression (cell cycle markers)	10 <sup>-10*</sup> 10 <sup>-10*</sup> 10 <sup>-10*</sup>	10 <sup>-11</sup> , 10 <sup>-10*</sup> , 10 <sup>-9*</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup> , 10 <sup>-6</sup> , 10 <sup>-5</sup> 10 <sup>-10*</sup> , 10 <sup>-8*</sup> , 10 <sup>-6*</sup> 10 <sup>-10*</sup> , 10 <sup>-8*</sup> , 10 <sup>-6*</sup>	7 3 3	7 3 (5) 3 (5)	Yes No no	80	318 319 320	199	28 200 201

Chepelev 2013 [93]	HEK293 embryonic kidney cells	Human	Enhanced expression of Nrf1/2-ARE pathway	10 <sup>-5*</sup>	10 <sup>-5*</sup> , 10 <sup>-4*</sup> , 2x10 <sup>-4*</sup>	3	2	No	81	321	202	29
			Cell viability		10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup> , 10 <sup>-5</sup> , 5x10 <sup>-5*</sup> , 10 <sup>-4*</sup> , 2x10 <sup>-4</sup>	7	5	Yes		322	203	
			Reactive oxygen species production		10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup> , 10 <sup>-5*</sup> , 5x10 <sup>-5*</sup> , 10 <sup>-4*</sup> , 2x10 <sup>-4*</sup>	7	5	No		323	204	
			Glutathione content		10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup> , 10 <sup>-5</sup> , 5x10 <sup>-5*</sup> , 10 <sup>-4*</sup> , 2x10 <sup>-4</sup>	7	5	Yes		324	205	
			GSH/GSSG ratio		10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup> , 10 <sup>-5</sup> , 5x10 <sup>-5</sup> , 10 <sup>-4*</sup> , 2x10 <sup>-4</sup>	7	5	Yes		325	206	
			Transactivational activity (Nrf1)		10 <sup>-5</sup> , 10 <sup>-4*</sup> , 2x10 <sup>-4</sup>	3	2	Yes		326	207	
			Transactivational activity (Nrf2)		10 <sup>-5</sup> , 10 <sup>-4</sup> , 2x10 <sup>-4*</sup>	3	2	No		327	208	
Dairkee 2013 [94]	Primary breast epithelial cells	Human, high risk donors	Gene expression	10 <sup>-7*</sup>	10 <sup>-7*</sup>	1	1	n/a		328		
Gentilcore 2013 [95]	FRTL-5 thyroid follicular cells	Rat	Cell viability	n/a	10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup> , 10 <sup>-5</sup> , 10 <sup>-4</sup>	6	6	Unaffected	82	329		
			Expression of thyroid related genes	n/a	10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup> , 10 <sup>-5</sup> , 10 <sup>-4</sup>	6	6	Unaffected		330		
			Expression of genes involved in thyroid hormone synthesis	10 <sup>-4*</sup>	10 <sup>-4*</sup>	1	1	n/a		331		
		Human	Expression of thyroid-specific transcription factors	10 <sup>-9*</sup>	10 <sup>-9*</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup> , 10 <sup>-5*</sup> , 10 <sup>-4*</sup>	6	6	no		332	209	
			Expression of thyroid-specific transcription factors	10 <sup>-9*</sup>	10 <sup>-9*</sup> , 10 <sup>-8</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup> , 10 <sup>-5*</sup> , 10 <sup>-4*</sup>	6	6	no		333	210	
			Expression of thyroid-specific transcription factors	10 <sup>-9*</sup>	10 <sup>-9*</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup> , 10 <sup>-5*</sup> , 10 <sup>-4*</sup>	6	6	no		334	211	
SKOV-3 ovarian adenocarcinoma cells	Expression of thyroid-specific transcription factors	10 <sup>-9*</sup>	10 <sup>-9*</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup> , 10 <sup>-5</sup> , 10 <sup>-4*</sup>	6	6	no	335	212				
	Expression of thyroid-specific transcription factors	10 <sup>-8*</sup>	10 <sup>-8*</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup>	3	3	no	336	213				
Gong 2013 [96]	INS-1 pancreatic cells	human	hIAPP aggregation		10 <sup>-5</sup> to 1.5x10 <sup>-6</sup> (no statistics)	5	2	No – VO*	83	337	214	30
			Cell viability	10 <sup>-5*</sup>	5x10 <sup>-6</sup> , 10 <sup>-5*</sup> , 2.5x10 <sup>-5*</sup> , 5x10 <sup>-5*</sup>	4	2	No		338	215	
			Dye leakage (viability assay)	5x10 <sup>-7*</sup>	5x10 <sup>-7*</sup> , 10 <sup>-6*</sup> , 2x10 <sup>-6*</sup> , 5x10 <sup>-6*</sup> , 10 <sup>-5</sup>	5	3	Yes		339	216	
			Production of reactive oxygen species	5x10 <sup>-5*</sup>	2x10 <sup>-5</sup> , 5x10 <sup>-5*</sup>	2	1	No		340	217	
Grasselli 2013 [97]	FaO hepatoma	Rat	Intracellular TAG content	1.3x10 <sup>-7*</sup>	1.3x10 <sup>-9</sup> , 1.3x10 <sup>-8</sup> , 1.3x10 <sup>-7*</sup> , 1.3x10 <sup>-6*</sup>	4	4	No	84	341	218	
			Cell viability	n/a	1.3x10 <sup>-9</sup> , 1.3x10 <sup>-8</sup> , 1.3x10 <sup>-7</sup> , 1.3x10 <sup>-6</sup>	4	4	Unaffected		342		
Hectors 2013 [98]	INS-1 beta cells	Human	Insulin secretion in response to glucose	10 <sup>-8*</sup>	10 <sup>-9</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup>	3	3	No	85	343	219	
Kim 2013 [99]	SNUhES3 embryonic stem cells	Human	Gene expression in embryoid bodies	10 <sup>-7*</sup>	10 <sup>-7*</sup>	1	1	n/a		344		
			Gene expression in embryoid bodies	10 <sup>-7*</sup>	10 <sup>-7*</sup>	1	1	n/a	345			
Liu 2013 [100]	Embryonic midbrain cells	Rat	Proliferation	10 <sup>-4*</sup>	10 <sup>-12</sup> , 10 <sup>-10</sup> , 10 <sup>-8</sup> , 10 <sup>-6</sup> , 10 <sup>-4*</sup>	5	5 (9)	No	86	346	220	
			Differentiation	10 <sup>-4*</sup>	10 <sup>-12</sup> , 10 <sup>-10</sup> , 10 <sup>-8</sup> , 10 <sup>-6</sup> , 10 <sup>-4*</sup>	5	5 (9)	No		347	221	
			Cell cycle kinetics	10 <sup>-4*</sup>	10 <sup>-8</sup> , 10 <sup>-4*</sup>	2	2 (5)	No		348	222	
			Apoptosis	10 <sup>-4*</sup>	10 <sup>-8</sup> , 10 <sup>-4*</sup>	2	2 (5)	No		349	223	
			Gene expression	10 <sup>-4*</sup>	10 <sup>-9</sup> , 10 <sup>-4*</sup>	2	2 (5)	No		350	224	

Ribeiro-Varandas 2013 [101]	Umbilical vascular endothelial cells	Human	Cell viability	n/a	4.4x10 <sup>-8</sup> , 4.4x10 <sup>-6</sup>	2	2 (3)	Unaffected	87	351	225	
			DNA double strand breaks	n/a	4.4x10 <sup>-8</sup> , 4.4x10 <sup>-6</sup>	2	2 (3)	Unaffected		352		
			Micronuclei	4.4x10 <sup>-8*</sup>	4.4x10 <sup>-8*</sup> , 4.4x10 <sup>-6*</sup>	2	2 (3)	No		353		
			Expression of genes involved in chromosome segregation	4.4x10 <sup>-6*</sup>	4.4x10 <sup>-8</sup> , 4.4x10 <sup>-6*</sup>	2	2 (3)	No		354		
			Expression of genes involved in chromosome segregation	4.4x10 <sup>-8*</sup>	4.4x10 <sup>-8*</sup> , 4.4x10 <sup>-6*</sup>	2	2 (3)	No		355		
			% with abnormal mitosis	4.4x10 <sup>-8*</sup>	4.4x10 <sup>-8*</sup> , 4.4x10 <sup>-6*</sup>	2	2 (3)	No		356		
	Colon adenocarcinoma cells	Human	% with abnormal mitosis	4.4x10 <sup>-8*</sup>	4.4x10 <sup>-8*</sup> , 4.4x10 <sup>-6*</sup>	2	2 (3)	No	357	229		
			Cell viability	n/a	4.4x10 <sup>-8</sup> , 4.4x10 <sup>-6</sup>	2	2 (3)	Unaffected	358			
			DNA double strand breaks	n/a	4.4x10 <sup>-8</sup> , 4.4x10 <sup>-6</sup>	2	2 (3)	Unaffected	359			
			Micronuclei	n/a	4.4x10 <sup>-8</sup> , 4.4x10 <sup>-6</sup>	2	2 (3)	Unaffected	360			
Expression of genes involved in chromosome segregation	n/a	4.4x10 <sup>-8</sup> , 4.4x10 <sup>-6</sup>	2	2 (3)	No	361	230					
								Expression of genes involved in chromosome segregation	n/a	4.4x10 <sup>-8</sup> , 4.4x10 <sup>-6</sup>	2	2 (3)
Sheng 2013 [102]	GC-1 spermatogonial cells		Activation of AP-1 site on GPR30	10 <sup>-9*</sup>	10 <sup>-9*</sup>	1	1	n/a		363		
			Gene expression	10 <sup>-9*</sup>	10 <sup>-9*</sup>	1	1	n/a		364		
			Cell proliferation	10 <sup>-9*</sup>	10 <sup>-9*</sup>	1	1	n/a		365		
Teng 2013 [103]	HEK293 embryonic kidney cells	Human	ER-bla assay		10 <sup>-11</sup> to 10 <sup>-4</sup> , no statistics	Many	8	No – VO*	88	366	231	31
			AR-bla assay		10 <sup>-11</sup> to 10 <sup>-4</sup> , no statistics	Many	8	No – VO*		367	232	
			ERα activation		10 <sup>-8</sup> to 10 <sup>-4</sup> , no statistics	Many	5	Yes – VO*		368	233	
			ERα function		10 <sup>-8</sup> to 10 <sup>-4</sup> , no statistics	Many	5	No – VO*		369	234	
			Activation of AR transcriptional activity		10 <sup>-8</sup> to 10 <sup>-4</sup> , no statistics	Many	5	Unaffected		370		
			Inhibition of AR transcriptional activity		10 <sup>-8</sup> to 10 <sup>-4</sup> , no statistics	Many	5	Yes – VO*		371	235	
			ERα nuclear foci formation		10 <sup>-11</sup> to 10 <sup>-5</sup> , no statistics	Many	7	No – VO*		372	236	
			E2-induced nuclear foci formation		10 <sup>-11</sup> to 10 <sup>-4</sup> , no statistics	Many	8	No – VO*		373	237	
			1881-induced nuclear foci formation		10 <sup>-11</sup> to 10 <sup>-4</sup> , no statistics	many	8	No – VO*		374	238	
Vinas et al. 2013 [104]	GH3/B6/F10 pituitary tumor cells	Rat	pERK expression	10 <sup>-15*</sup>	10 <sup>-15*</sup>	1	1	n/a			375	
Vinas et al. 2013 [105]	GH3/B6/F10 pituitary tumor cells	Rat	pERK expression	10 <sup>-15*</sup>	10 <sup>-15*</sup> , 10 <sup>-14*</sup> , 10 <sup>-13*</sup> , 10 <sup>-12*</sup> , 10 <sup>-11*</sup> , 10 <sup>-10*</sup> , 10 <sup>-9*</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup>	9	9	Yes – VO*	89	376	239	32
			pJNK expression	10 <sup>-15*</sup>	10 <sup>-15*</sup> , 10 <sup>-14*</sup> , 10 <sup>-13*</sup> , 10 <sup>-12*</sup> , 10 <sup>-11*</sup> , 10 <sup>-10*</sup> , 10 <sup>-9*</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup>	9	9	Yes – VO*		377	240	
			Cell number	10 <sup>-7*</sup>	10 <sup>-15</sup> , 10 <sup>-14</sup> , 10 <sup>-13</sup> , 10 <sup>-12</sup> , 10 <sup>-11</sup> , 10 <sup>-10</sup> , 10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7*</sup>	9	9	No		378	241	
			Prolactin expression		10 <sup>-15</sup> , 10 <sup>-14</sup> , 10 <sup>-13</sup> , 10 <sup>-12</sup> , 10 <sup>-11*</sup> , 10 <sup>-10</sup> , 10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup>	9	9	Yes		379	242	
Vo 2013 [106]	GH3/B6/F10 pituitary tumor cells	Rat	Calbindin-D9k mRNA & protein expression	10 <sup>-7*</sup>	10 <sup>-7*</sup> , 10 <sup>-6*</sup> , 10 <sup>-5*</sup>	3	3	No	90	380	243	
			Progesterone receptor mRNA & protein expression	10 <sup>-7*</sup>	10 <sup>-7*</sup> , 10 <sup>-6*</sup> , 10 <sup>-5*</sup>	3	3	No		381	244	
			ERα mRNA & protein expression	n/a	10 <sup>-7</sup> , 10 <sup>-6</sup> , 10 <sup>-5</sup>	3	3	Unaffected		382	245	
Wang 2013 [107]	Primary dorsal root ganglion neurons	Rat	Inhibition of calcium influx		10 <sup>-8</sup> to 10 <sup>-7</sup> , no statistics	4	2	No – VO*	91	383	246	
Warita 2013 [108]	Primary embryonic hypothalamic cells	Mouse	Expression of DNA methyltransferase mRNAs	2x10 <sup>-4*</sup>	2x10 <sup>-8</sup> , 2x10 <sup>-7</sup> , 2x10 <sup>-6</sup> , 2x10 <sup>-5</sup> , 2x10 <sup>-4*</sup>	5	5	No	92	384	247	
			Expression of Mecp2 mRNAs	2x10 <sup>-5*</sup>	2x10 <sup>-8</sup> , 2x10 <sup>-7</sup> , 2x10 <sup>-6</sup> , 2x10 <sup>-5*</sup> , 2x10 <sup>-4*</sup>	5	5	No		385	248	
Yang 2013 [109]	Primary embryonic stem cells	Human	Mammosphere area	n/a	10 <sup>-9</sup> , 10 <sup>-8</sup> , 10 <sup>-7</sup> , 10 <sup>-6</sup>	4	4	Unaffected	93	386		
			Expression of pluripotent markers	10 <sup>-9*</sup>	10 <sup>-9*</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup>	4	4	No		387	249	
			Expression of mammary epithelial markers	10 <sup>-8*</sup>	10 <sup>-9</sup> , 10 <sup>-8*</sup> , 10 <sup>-7*</sup> , 10 <sup>-6*</sup>	4	4	No		388	250	

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